Amendments to the Drawings:

Replacement sheets for FIGS. 1-4 are enclosed which formalize the drawings that were submitted with the application. No other changes have been made. Formal drawings are submitted herewith under separate Letter to the Official Draftsperson. Approval by the Examiner is respectfully requested.

REMARKS

By this amendment, the specification has been amended to reflect the serial numbers of related cases.

Claims 1-31 are pending in the application and are rejected.

Claims 1-4, 6-8, 10-19, 21-23 and 25-31 are rejected under 35 USC § 103(a) as being unpatentable over Applicant's Admitted prior art in view of U.S. Patent No. 6,873,093 to Yu.

Applicants admitted prior art does disclose the features noted by the Examiner. Applicants believe the prior art doesn't disclose the layer including color change medium as in element b of independent claims 1 and 15 when used in combination with the microcavity structure set forth in element a of claims 1 and 15. This claimed arrangement improves the color of light produced by the claimed OLED device when viewed in an off-axis direction.

The Examiner's argues citing Yu against claims 1 and 15, on page 3 states "Figures 5 and 6, an organic light emitting diode display structure including: a layer (365) including a color change medium (312, 317, 322) which is responsive to a wavelength of light shorter (Blue light with shorter wavelength) than the particular wavelength (green light wavelength and red light wavelength) by absorbing such shorter wavelengths of light (blue) and emitting light corresponding in color (green and red) to the particular wavelength (green light wavelength and red light wavelength) for the purpose of improving contrast ratios between different colors and thus improves the readability of the OLED device in high ambient light conditions".....Underlining added.

Fig. 6 in Yu clearly relates to a color filter array and not color change medium. See Yu, column 6, lines 52-62. In the Yu patent, Color change medium (312, 317, 322) does not improve contrast, but it is the excitation prevention layer (370) which absorbs the low wavelength ambient light prior to it reaching the OLED without re-emitting any other light that serves to improve the contrast ratio under high ambient conditions. Claims 1 and 15 do not require or make use of such excitation prevention layers. In fact, the claimed color changing layer absorbs lower wavelength of light and re-emits at a higher wavelength corresponding to the desired emission color. Without such an excitation prevention layer, Yu's teaching for achieving improved contrast can not be applied the claimed structure as suggested by the examiner as underlined above.

It is believed that independent claims 1 and 15, define unobvious subject matter in view of Yu. The remaining claims depend on either claims 1 or 15 and also should be allowable.

In the Examiner's rejection of claim 4, the examiner interprets 224, which Yu preferably indicates as the anode, to be the semi-transparent reflector of the present invention. However, this is a misinterpretation of the Yu's structure as since Yu requires 224 to be a "transparent electrode". This transparency is essential to functioning of Yu's structure as shown in Yu's Fig. 1. Yu describes that incident beam (120) is either reflected from the polarizer (105) as portion (125) absorbed by the polarizer, or the remainder (122) passes through the OLED. The claimed microcavity structure of claims 1 and 15, which employ a semi-transparent reflect instead of the transparent reflector of Yu, and additional reflection occurs as the semi-transparent reflector prior to the light entering the OLED. This reflection is not accounted for by Yu. In this way, microcavity OLED structures are substantially different than the OLED structure employed by Yu. Yu does not teach how to account for these additional reflections or the impact such reflections would have on the placement of his layers. Applicants fail to see how Yu's teachings could be applied to a microcavity OLED structure.

In the Examiner's rejection of claim 16, the Examiner states that Yu also teaches a common emitting layer. However, in Yu's common emitting layer, the light produced by the emitting layer does not reach the viewer in at least one of the pixels. That is, for example, in the green pixel, the blue light emitted by the common blue emitting layer is completely absorbed by the color change medium and converted to green. In claim 16, the common emitting layer produces light having spectral components for each of the associated pixels. That is, the emitting layer produces blue light which is emitted form the blue pixel, green light which is emitted from the green pixel, and red light which is emitted form the red pixel. In this way, the color change medium of the claims in this case, does not operate in the same manner as the device taught by Yu. In Yu's device portion 312 corresponding to the blue pixel is "essentially transparent". This permits the blue light can pass to the viewer without any down-conversion, which is inherently less than perfectly efficient. In the present invention, at least for the on-axis direction portion of the light, light is able to pass directly to the viewer for all the different pixels, and no down-conversion is required for this portion of the light as for this light as in Yu's device. Therefore, no loss in this portion of the light occurs from any in-efficiency from said down conversion.

Therefore, the claimed tuned OLED device, has a different physical operation that is not shown in or suggested by Yu.

Claims 5 and 20 are rejected under 35 USC § 103(a) as being unpatentable over Applicant's Admitted prior art in view of U.S. Patent No. 6,873,093 to Yu and in further view of U.S. Patent No. 6,309,486 to Kawaguchi.

The admitted prior art, and Yu have been discussed above. Kawaguchi discloses a film bonded to a color conversion filter to provide protection and prevention of contamination during manufacture. There is no suggestion in the reference of the claimed dielectric stack in the position required in claims 5 and 20. Kawaguchi is not a microcavity structure and there is no suggestion to combine it with Yu.

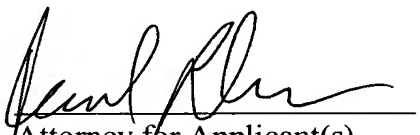
Claims 9 and 24 are rejected under 35 USC § 103(a) as being unpatentable over Applicant's Admitted prior art in view of U.S. Patent No. 6,873,093 to Yu and in further view of U.S. Patent No. 6,281,634 to Yokoyama

Yokoyama's art as discussed above, was cited for it's use of an active matrix device. The Examiner is correct when he states that Yokoyama discloses an active matrix device. However, claims 9 and 24 depend on claims 1 and 15 respectively and should be allowable along with these independent claims.

It is believed that these changes now make the claims clear and definite and, if there are any problems with these changes, Applicants' attorney would appreciate a telephone call.

In view of the foregoing, it is believed none of the references, taken singly or in combination, disclose the subject matter of either independent claim 1 or independent claim 15. The remaining claims depend on either claims 1 or 15 and should also be allowable. Accordingly, this application is believed to be in condition for allowance, the notice of which is respectfully requested.

Respectfully submitted,



Attorney for Applicant(s)
Registration No. 22,363

Raymond L. Owens/djw
Rochester, NY 14650
Telephone: 585-477-4653
Facsimile: 585-477-4646
If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.